Prehospital Use of Video Laryngoscopy

Video laryngoscopy was faster and required fewer attempts than direct laryngoscopy when performed by trained paramedics.

Video laryngoscopy is rapidly becoming standard care in hospitals, but what about use in the prehospital arena? Investigators from an emergency medical services (EMS) system in Washington State compared intubation characteristics for 300 consecutive patients who were intubated by paramedics using traditional laryngoscopy and 315 consecutive patients who were intubated using the GlideScope Ranger video laryngoscope. Eligible patients were aged 6 years and older and weighed at least 20 kg. Paramedics were trained in use of the GlideScope on airway simulation manikins during an annual 6-hour airway course.

Mean age, number of paralytic-assisted intubations, and numbers of trauma and medical patients did not differ significantly between groups. The rate of intubation success was 97% in the GlideScope group and 95% in the traditional laryngoscopy group. The GlideScope group had a significantly fewer average number of attempts (1.2 vs. 2.3) and a shorter mean time to intubation (21 vs. 42 seconds) and maximum time without ventilation (37 vs. 55 seconds). Tube placement was confirmed by visualization when possible, auscultation, misting, and continuously monitored capnography; no unrecognized esophageal intubations were noted. One patient in each group could not be intubated or ventilated.

Comment: This study demonstrates that video laryngoscopy is feasible and possibly even superior to traditional laryngoscopy in the prehospital setting.

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• Medline abstract (Free)